CONTENTS OF VOLUME 11

Volume 11 Number 1 1992

Tunnelling of heavy particles in the low temperature chemistry

V. A. BENDERSKII and V. I. GOLDANSKII, *Institute of Chemical Physics, Moscow, Russia* 1

Vibronic transitions in rare earth spectroscopy

G. BLASSE, *Utrecht University, The Netherlands* 71

Sticking of molecular hydrogen on simple, noble and transition metal surfaces

A. WINKLER and K. D. RENDULIC, *Technische, Universität Graz, Graz, Austria* 101

Delay effects and differential delay equations in chemical kinetics

I. R. EPSTEIN, *Brandeis University, Waltham, USA* 135

Transport cross-sections for polyatomic gases

V. VESOVIC and W. A. WAKEHAM, *Imperial College, London, England* 161

Volume 11 Number 2 1992

Spin-forbidden chemistry within the Breit–Pauli approximation

D. R. YARKONY, *The Johns Hopkins University, Baltimore, USA* 195

Measuring aromaticity

ZHONGXIANG ZHOU, *University of North Carolina, North Carolina, USA* 243

Chemical reactions in the process of matrix devitrification

I. M. BARKALOV and D. P. KIRYUKHIN, *Russian Academy of Sciences, Moscow, Russia* 263

Light-induced kinetic effects in molecular gases

L. J. F. HERMANS, *Leiden University, Leiden, The Netherlands* 289

Grid methods for solving the Schrödinger equation and time dependent quantum dynamics of molecular photofragmentation and reactive scattering processes

G. G. BALINT-KURTI, R. N. DIXON and C. CLAY MARSTON, *University of Bristol, Bristol, England*..... 317

The effect of tetrahedral substitution of Si by Al on the surface acidity of the oxygen plane of clay minerals

S. YARIV, *The Hebrew University of Jerusalem, Jeruselem, Israel*..... 345

Index of authors (with titles of papers)..... 377